# 9 POLICY AND STRATEGIC RECOMMENDATIONS

The overarching recommendation of the KFP is to focus on improving transportation infrastructure that is most beneficial to freight movement. Proposed program and policy recommendations to guide this overall freight strategy were developed with the KFP goals in mind and are discussed in this chapter. A program is the organization of a funding initiative targeted at achieving certain outcomes, often with its own set of funding requirements, process requirements, and organizational structure. A policy is an institutional direction, initiative, or directive that focuses on particular issues directly impacting the freight community. A few freight-related projects identified from KYTC's 2016 Recommended Highway Plan are included as potential freight projects to consider.

This chapter begins with descriptions of the various freight-related funding programs available. These programs are important to assist with funding freight projects, which will move goods safely and efficiently in Kentucky.

## 9.1 FUNDING PROGRAMS FOR FREIGHT-RELATED PROJECTS

Funding multimodal freight projects can be difficult due to funding restrictions at the state and federal levels. For example, the Kentucky Road Fund is constitutionally mandated to be used only on highways. The purpose and use of public funds is defined by legislative bodies through the budgeting process, while environmental, labor, and procurement laws affect processes and expenditures for all aspects of transportation projects from planning through maintenance. Federal and state funding programs for freight-related projects are summarized below.

### 9.1.1 Key Federal Freight Funding and Financing Provisions

Various federal grant/loan opportunities are available for freight-related projects, and each of the programs has its own unique requirements. A majority of the funding for freight-related improvements is administered through the USDOT, with additional funding from non-USDOT sources. The federal transportation infrastructure funding and financing programs are discussed in this section.

#### 9.1.1.1 National Highway Freight Program

The National Highway Freight Program (NHFP) was established with the passage of the FAST Act in December 2015. The NHFP includes new freight planning policy, a new National Highway Freight Network (NHFN), and new formula funding for freight projects. To be eligible for NHFP funds, freight projects must contribute to the efficient movement on freight on the NHFN and be identified in the freight investment plan. In addition to highway projects, any surface transportation project to improve the flow of freight into and out of a freight intermodal or freight rail facility is an eligible project. This option is limited to 10% of the total funding apportioned to Kentucky. KYTC's freight investment plan is presented in Chapter 10.

#### 9.1.1.2 National Highway Performance Program

The National Highway Performance Program (NHPP) guides activities related to the condition and performance of the NHS and provides funding for the construction of new facilities on the NHS. It ensures that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the NHS.[83] Under MAP-21, routes eligible for NHPP funding include:

- The interstate system
- All principal arterials (including those not previously designated as part of the NHS) and border crossings on those routes
- Intermodal connectors – highways that provide motor vehicle access between the NHS and major intermodal transportation facilities
- Strategic Highway Network (STRAHNET) – the network of highways important to U.S. strategic defense
- STRAHNET connectors to major military installations

### 9.1.1.3 Surface Transportation Program

The Surface Transportation Program provides flexible funding for projects on any federal-aid highway, on bridges on any public roads, and on bridge and tunnel inspection and inspector training.[84] Eligible freight projects also include bridge clearance increases to accommodate double-stack freight trains, capital costs of advanced truck stop electrification systems, freight transfer yards, and truck parking facilities.

### 9.1.1.4 Congestion Mitigation and Air Quality Program

The Congestion Mitigation and Air Quality Program (CMAQ) program is continued in MAP-21 to provide a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act.[85] CMAQ money supports transportation projects that reduce mobile source emissions in areas designated by the U.S. EPA as nonattainment or maintenance of national ambient air quality standards. Eligible activities include those related to rail intermodal freight transportation improvements. To be eligible for funding, the project must reduce emissions of criteria pollutants for which the area is in non-attainment.[86] CMAQ funding is administered jointly by the FHWA and FTA and is allocated among the states based on the severity of their air quality status.

### 9.1.1.5 Highway Safety Improvement Program

The Highway Safety Improvement Program (HSIP) supports projects that improve the safety of road infrastructure. These projects could add capacity; improve alignment or operations, such as intersections and curves; or make road improvements, such as signing, pavement markings, or adding rumble strips.

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[83] *U.S. Department of Transportation, FHWA, retrieved July 26, 2014 from https://www.fhwa.dot.gov/map21/factsheets/freight.cfm*

[84] *U.S. Department of Transportation, FHWA, retrieved July 26, 2014 from https://www.fhwa.dot.gov/map21/factsheets/freight.cfm*

[85] *Ibid*

[86] *The criteria pollutants are nitrogen dioxide, lead, carbon monoxide, ozone, particulate matter and sulfur dioxide.*

### 9.1.1.6 The Transportation Infrastructure Finance and Innovation Act

The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. The goal of TIFIA financing is to leverage federal resources and stimulate private capital investment in transportation infrastructure. TIFIA financing is available for large-scale public or private transportation projects. The program is aimed at large projects with a minimum value of approximately $50 million. The maximum TIFIA-financed portion is 33 percent and is administered by the USDOT's TIFIA Joint Program Office.

### 9.1.1.7 Railway-Highways Crossing (Section 130) Program

Funds to improve rail-highway crossings are set-aside from the federal HSIP apportionment. The program provides funds for the elimination of hazards at railway-highway crossings and is apportioned to states by formula.[87]

### 9.1.1.8 Federal Rail Safety Improvement Act of 2008

The Federal Rail Safety Improvement Act primarily addresses rail safety through regulations. It also authorizes grants for investing in rail technology, railroad safety infrastructure, rail grade crossing improvements, and education, subject to annual appropriations. Provisions under this act are administered by the FRA.

### 9.1.1.9 Rail Line Relocation and Improvement Capital Grant Program

Under this program, a state (or political subdivision such as a parish) is eligible for a grant from FRA for any construction project that improves the route or structure of a rail line and involves a lateral or vertical relocation of a portion of rail line or mitigates the adverse effects of rail traffic on safety, motor vehicle traffic flow, community quality of life, or economic development.

### 9.1.1.10 Railroad Rehabilitation and Improvement Financing Program

The Railroad Rehabilitation and Improvement Financing (RRIF) program provides direct federal loans and loan guarantees to finance the development of railroad infrastructure.[88] Under this program, established in 1998, the FRA provides up to $35 billion in direct loans and loan guarantees, with $7 billion reserved for Class I railroad projects. The loans can be used to refinance outstanding infrastructure debt. The program also helps to finance project investments directly, up to the total cost of the project. State and local governments, government-sponsored authorities, corporations, railroads, and others can participate in the program.

### 9.1.1.11 Transportation Investment Generating Economic Recovery Discretionary Grants

The TIGER Discretionary Grant program provides a unique opportunity for USDOT to invest in road, rail, transit, and port projects that have the potential to achieve critical national objectives. Since 2009, Congress has dedicated more than $4.1 billion for six rounds to fund projects that have a significant impact on the nation, a region, or a metropolitan area.[89]

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[87] *U.S. Department of Transportation, FHWA, retrieved August 14, 2014 from http://safety.fhwa.dot.gov/xings/*

[88] *U.S. Department of Transportation, FRA, retrieved August 14, 2014 from http://www.fra.dot.gov/Page/P0128*

[89] *U.S. Department of Transportation, retrieved 8/14/14 from http://www.dot.gov/tiger*

### 9.1.1.12 U.S. Army Corps of Engineers Harbor Maintenance Trust Fund

The USACE is responsible for maintaining federal navigation channels. Under the Harbor Maintenance Trust Fund (HMTF), the principal legislative vehicle for guiding the USACE Civil Works Program under the 2014 WRRDA, expenditures will increase each year until 2025, when 100 percent of available funds will be directed towards operations and maintenance activities. The HMTF is funded by a harbor maintenance tax (HMT) on imported and domestic waterborne cargo and cruise passengers. This fund is used to cover the USACE's cost of dredging channels, maintaining jetties and breakwaters, and operating locks along the coasts and in the Great Lakes. The HMTF may be drawn on only with an appropriation by Congress.

### 9.1.1.13 Inland Waterways Users Trust Fund for Locks and Dams

The Inland Waterways Fuel Tax and Trust Fund were established by the Water Resources Development Act of 1986. The act established a federal marine fuel tax of $0.20 per gallon to support 50 percent of the cost of inland waterway infrastructure development and rehabilitation. The tax generates approximately $85 million annually. The Trust Fund balance began to decline in 2003 when increasing amounts were used to modernize the inland waterway system. This continued until 2009 when the Trust Fund balance was exhausted, limiting the amount of spending to the annual tax revenues available. There is now a substantial backlog of authorized projects, and the limited funding available has been spread over a list of projects, which has extended the construction time for each project. The 2014 WRRDA directs the Secretary of the Army to conduct a study to report on potential revenue sources for the Inland Waterway Trust Fund. With the passing of the Achieving a Better Life Experience (Able) Act, as of April 1, 2015 the Inland Waterway Trust Fund tax was increased to $0.29 per gallon.

### 9.1.1.14 Federal Aviation Administration Airport Improvement Program

The Airport Improvement Program (AIP) is administered by the FAA and provides grants for planning and developing public-use airports that are included in the National Plan of Integrated Airport Systems (NPIAS). For large and medium primary hub airports, the grant covers 75 percent of eligible costs (or 80 percent for noise program implementation). For small primary, reliever, and general aviation airports, the grant covers a range of 90 to 95 percent of eligible costs, based on statutory requirements. Eligible projects include improvements related to enhancing airport safety, capacity, security, and environmental concerns. In general, sponsors can use AIP funds on most airfield capital improvements or repairs and, in some specific situations, for terminals, hangars, and non-aviation development. Kentucky airports received a total of approximately $245 million of AIP funding from 2010 to 2014.

### 9.1.1.15 Department of Commerce

The U.S. Department of Commerce (DOC) administers federal funding for grants and cooperative agreements in the form of discretionary and nondiscretionary funds. The grants most germane to freight are administered by the Economic Development Administration (EDA). The EDA provides public works funds for distressed communities to revitalize, expand, and upgrade their physical infrastructure to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term, private sector jobs, and investment.[90]

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[90] *http://www.eda.gov/programs.htm*

#### 9.1.1.16 National Highway Freight Program

The National Highway Freight Program (NHFP) was established with the passage of the FAST Act in December 2015. The NHFP includes new freight planning policy, a new National Highway Freight Network (NHFN), and new formula funding for freight projects. To be eligible for NHFP funds, freight projects must contribute to the efficient movement on freight on the NHFN and be identified in the freight investment plan. In addition to highway projects, any surface transportation project to improve the flow of freight into and out of a freight intermodal or freight rail facility is an eligible project. This option is limited to 10% of the total funding apportioned to Kentucky. KYTC's freight investment plan is presented in Chapter 10.

## 9.1.2 State Transportation Funding Programs/Sources

The state highway fund is constitutionally mandated, to be used only on highways. However, the Kentucky General Fund provides the mechanism for state funding for rail projects on a competitive basis with other statewide needs. Recent rail funding initiatives include the Kentucky Short Line Railroad Assistance (KSRA) Fund and Kentucky Railroad Crossing Improvement (KRCI) Fund. The following subsections describe state based transportation funding programs and sources available for transportation projects.

### 9.1.2.1 Kentucky Road Fund

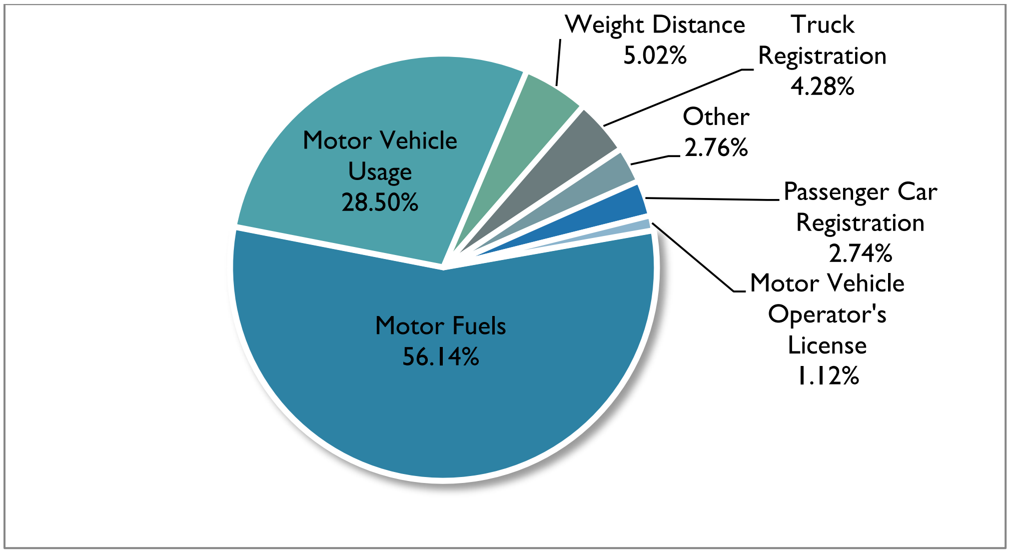
The Kentucky Road Fund is funded through four revenue sources: fuel taxes, usage taxes, registration fees, and licensing fees. Approximately 60 percent comes from state taxes on motor vehicle fuels as shown in **Figure 9-1**. Kentucky uses a percentage tax rate based on the wholesale cost of fuel, with a per gallon statutory floor of $0.246 per gallon. This amount includes a $0.064 fixed component plus a variable component, which is based on the average wholesale prices of gas. The rate cannot increase by more than 10 percent of the variable rate established at the close of the previous fiscal year. Current tax rates for FY 2015 stand at about $0.246 per gallon of gasoline and about $0.28 per gallon of diesel and other fuels. These rates have risen over the past several years as wholesale prices have continued to increase but started falling as the wholesale price fell beginning in January 2014.

The vehicle sales tax, also called a usage tax, makes up about 25 percent of annual revenue. Registration and licensing fees paid by commercial trucking companies generate approximately 10 percent of fund revenues, with the remaining 5 percent from vehicle and driver licensing and other fees.

**Kentucky Constitution, Section 230**: *Money not to be drawn from Treasury unless appropriated – Annual publication of accounts – Certain revenues usable only for highway purposes.*

No money shall be drawn from the State Treasury, except in pursuance of appropriations made by law; and a regular statement and account of the receipts and expenditures of all public money shall be published annually. No money derived from excise or license taxation relating to gasoline and other motor fuels, and no moneys derived from fees, excise or license taxation relating to registration, operation, or use of vehicles on public highways shall be expended for other than the cost of administration, statutory refunds and adjustments, payment of highway obligations, costs for construction, reconstruction, rights-of-way, maintenance and repair of public highways and bridges, and expense of enforcing state traffic and motor vehicle laws.

**Figure 9-1: Sources of Revenue for State Road Fund**




*Source: Kentucky's Long-Range Transportation Plan 2014-2035*

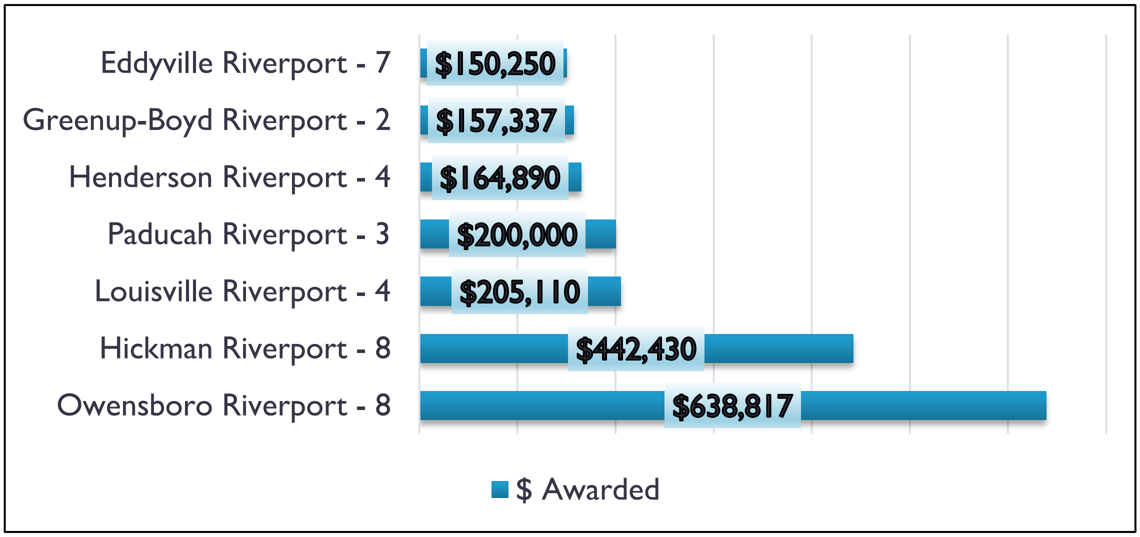
One of the greatest challenges confronting KYTC is managing public expectations with limited funding available to meet the commonwealth's highway needs. Highway maintenance costs are far from routine when a major bridge can cost $200 million to replace, a mile of interstate highway can cost $5 to $10 million to repair, and overall identified highway needs throughout Kentucky total more than $50 billion. In the face of these overwhelming basic needs, KYTC's Recommended Highway Plan is predicated upon a number of assumptions about the revenue stream that is expected for future state and federal highway construction programs administered by the Cabinet.

Kentucky's federal highway program will be largely matched with toll revenue credits through FY 2020. These credits are attributed to Kentucky by federal highway law in accordance with calculations that consider past levels of state fund investments (such as state-sponsored toll roads) in the federal highway system. Toll revenue credits do not generate cash and cannot be counted as real cash when used as a match. However, the credits allow KYTC the flexibility to use 100 percent federal funding on federal-aid projects. This provides KYTC the option to allocate more of its own funding for state projects under complete state control and oversight.

### 9.1.2.2 Kentucky Riverport Improvement

In 2012, the Kentucky General Assembly appropriated $500,000 in dollar-for-dollar matching funds in FYs 2013 and 2014 for the Riverport Improvement Program. The purpose of this program is to improve public riverports within Kentucky, with improvements limited to dredging and maintenance of access. This enactment has continued through FY 2018. These funds are made available to public riverports, and specific projects as recommended to the KYTC Secretary by the WTAB. This board advises state agencies, the Governor's Office, and General Assembly concerning matters affecting waterways. The General Assembly has appropriated this funding for riverport improvement grants and has tasked the WTAB with prioritizing the funds for optimum utilization. **Figure 9-2** shows the number of riverport improvement grants and total state grant funding awarded to each riverport listed from FY 2013 to FY 2016.

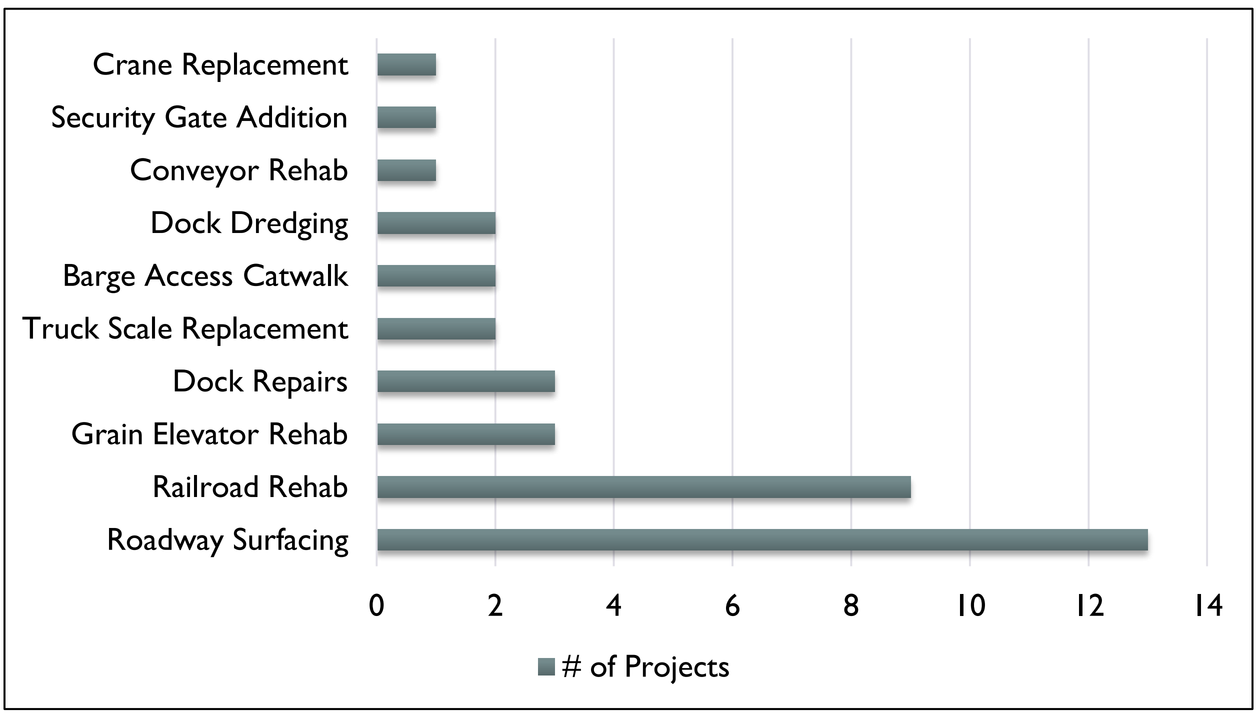
**Figure 9-2: FY 2013 to FY 2016 Riverport Improvement Grants**




*Source: Kentucky Transportation Cabinet, 2016*

A summary of all project types of the awarded riverport improvement grants are shown in **Figure 9-3**. Over half of the projects types involved railroad rehabilitation and roadway surfacing.

**Figure 9-3: Summary of all Kentucky Riverport Improvement Project Types**




*Source: Kentucky Transportation Cabinet, 2016*

### 9.1.2.3 Kentucky Railroad Crossing Improvement Fund

In October 2013, the commonwealth announced that $3.2 million in grants would be made available through FY 2014 to short line railroads to help fund safety improvements at highway-rail at-grade crossings in Kentucky. The grants, all of which required a dollar-for-dollar match from the applicants, were funded through the KRCI Program, administered by KYTC.

While this is a non-recurring funding source, another $3.2 million ($1.6 million per year) was entered into the Transportation Budgets by the Kentucky Legislature for FY 2015 through FY 2018 to make additional rail safety improvements. These funds have been restricted to public safety improvements to at-grade crossings, railroad bridge overpasses, and railroad crossing safety equipment. Unlike the FY 2013-2014 grants, which required a 50 percent local match, the FY 2015-2016 funding was available with an 80 percent state share and 20 percent local match.

### 9.1.2.4 Kentucky Railroad Assistance Program

In addition to state grant funding, Kentucky makes certain tax credits available to companies and railroads that invest in rail-related projects. These are administered by and made available through the Kentucky Railroad Assistance Program (KRAP), and the three main programs under KRAP are the following: Economic Development Tax Credit, Nonrefundable Tax Credit for Railroad Improvement (50% tax credit), and Nonrefundable Tax Credit for Railroad Expansion or Upgrade to Accommodate Transportation of Fossil Energy Resources or Biomass Resources (25% tax credit).[91]

### 9.1.2.5 Freight Enhancement Loan Fund

The Kentucky Highlands Freight Enhancement Loan Fund primarily is used to provide lines of credit to finance operating costs for transportation-related businesses in the Kentucky Highlands service area. In addition, the Kentucky Highlands may use fund proceeds to provide fully-collateralized equipment financing for eligible borrowers. The origin of the fund is through the FY 2004 Omnibus Appropriations Act. It passed through FHWA and is administered by KYTC.

## 9.2 Program Recommendations

**Maintain and improve the designated highway Kentucky Freight Network to ensure the efficiency and connectivity of the freight transportation system.** The proposed freight network is identified in **Chapter 2**. Kentucky needs to further evaluate alternative funding and financing sources to ensure the Kentucky Freight System is preserved and maintained and critical high priority improvements are implemented.

**Develop a freight project prioritization framework to help decision-makers prioritize future freight investments.** Under the FAST Act, states are directed to identify short-term freight projects in a statewide plan. The FAST Act establishes two new dedicated freight programs and funding sources, intended to address freight needs that produce public benefits. A freight project prioritization framework would allow KYTC to evaluate and prioritize key multimodal freight projects using both quantitative and qualitative data and analysis.

**Implement and refine performance measures to track implementation progress.** KYTC should continue to expand its performance measures and indicators while considering the incorporation

[91] *http://transportation.ky.gov/Railroads/Pages/Railroad-Assistance-Funds.aspx*

of future data into a prioritization process. KYTC should work with its modal offices to identify other freight data needed to support the prioritization process.

**Develop a process to identify, monitor, and restore the condition of roadways that support the agriculture and energy industries.** The agriculture and energy industries depend on the state and rural roadway system to transport supplies and products to barges, to elevators, and to processing facilities. While these two industries are lumped together in this strategy, they have very different needs. The agriculture industry needs a network that can handle seasonal surges in tonnage, while the energy industry requires consistent and reliable routes daily. Developing a process to monitor, maintain, and improve this system will ensure that the economy continues to thrive and investments are made wisely.

**Ensure freight representation and participation by the private sector in the state and MPO planning process.** The FAST Act encourages the formation of a State Freight Advisory Committee with private and public sector freight representatives. KYTC should form a Freight Advisory Committee to help guide implementation of the KFP. This group can provide valuable input, and engaging the private sector in public sector planning efforts will require value on both sides. The public sector seeks valuable insight into the operational aspects and system needs of the private sector. The private sector expects that their input will be used to make decisions and to assist their business' operations.

**Support collaboration between KYTC and the Kentucky Cabinet for Economic Development (KCED) in identifying transportation needs, issues, and impacts and in recruiting industry and business to locate in Kentucky.** The responsibility of KYTC is to provide a safe, efficient, and reliable transportation system, while KCED is responsible for maintaining and attracting new business to the commonwealth. There is a strong incentive for collaboration between these two cabinets because each can improve the efforts of the other. The two can work together to identify clusters of targeted industries within the Commonwealth and the transportation issues facing each industry sector. KYTC should work with KCED, MPOs, Regional Planning Commissions (RPCs), and regional economic development agencies to develop and fund projects that will address the transportation needs of these industry clusters.

**Support the multi-state coordination of freight infrastructure improvements.** Freight movement transcends jurisdictional boundaries, and it is a global supply chain system that produces and delivers goods to their destination. Because a majority of freight originating in Kentucky is destined for locations outside of Kentucky, the commonwealth has a keen interest in coordinating freight infrastructure improvement with its neighbors. The FAST Act requires that plans consider multijurisdictional issues related to freight movement. Coordination across states in planning and selecting improvements can leverage political support into funding support.

**Update freight modal and system plans on a regular basis.** Modal plans provide excellent information and insight into the operations, conditions, and performance of the freight system. The KFP was informed by a few modal plans recently produced by KYTC. Keeping that information current can be a challenging task, but failing to update the plans can require that decisions be made with old and sometimes dated information. To provide decision-makers with the information they need for sound decision-making, these plans should incorporate updated data and be reexamined regularly. This will ensure their relevance and provide the critical freight system information for better planning and decision-making.

## 9.3 Policy Recommendations

**Goal 1: Providing a safe and secure system**

- Encourage participation of freight stakeholders in the development of future KYTC safety plans
- Work with legislators and the railroads to maintain and expand the KYTC Highway/Rail Crossing Safety Program
- Partner with the Division of Commercial Vehicle Enforcement, Kentucky State Police on initiatives to re-designate truck routes, truck parking, and WIM technology improvements
- Capitalize on the multistate TIGER grant to identify and expand truck parking locations

**Goal 2: Maintaining and improving existing infrastructure on a continual basis; ensuring dependable, effective, and efficient facilities**

- Focus investment in corridors that exhibit a strong correlation between truck vehicle miles traveled and substandard pavement and bridge ratings on the Tier 1, 2, and 3 highway freight network
- Mitigate disruptions along critical freight corridors by proactively analyzing bridge inspection reports for unfavorable trends; pay particular attention to corridors without recognized route redundancy
- Develop a plan for weigh station maintenance and safety precautions
- Continue to work with the railroads to identify opportunities and solve unique rail infrastructure challenges around Kentucky
- Continue to work with the riverports to identify opportunities and solve unique riverport infrastructure challenges around Kentucky

**Goal 3: Improving local, regional, and global connectivity and access; including all appropriate modes of transportation within a fully-integrated system; dependable access to markets, jobs, and resources**

- Update the NHS's Functional Classification
- Partner with local governments and private partners to proactively manage the condition of intermodal connectors and connectivity points
- Develop a program to educate local officials on the importance of intermodal connectors and work with local officials to mitigate negative impacts of the projected increase in truck traffic volumes
- Identify and close any first or last mile gaps near major manufacturing hubs and multimodal connectivity points
- Work to identify and improve highway connectivity with other modes

**Goal 4: Consideration of human and natural resources**

- Support the use of CMAQ funds towards freight-related transportation projects that reduce emissions. Projects include truck idle reduction technology, such as a truck stop electrification and GENSET technology to power train locomotives
- Proactively protect KYTC assets from potential freight-related incidents; identify potential barriers restricting freight movements, plan work zones, and detours to handle freight vehicles, etc.
- Improve and expand Intelligent Transportation Systems (ITS) technology along key corridors to increase efficiency and reliability

**Goal 5: Efficient and flexible use of available resources; transparent decision-making processes**

- Integrate freight into the KYTC data driven decision-making process
- Elicit private sector input to the decision-making process through the creation of a Freight Advisory Committee

# 9.4 Freight Transportation Projects

## 9.4.1 Highway

KYTC's 2016 Recommended Highway Plan discusses four highway mega-projects. A mega-project is a project that will cost near, or in excess of, $1 billion and are listed in **Table 9-1**.

**Table 9-1: Kentucky Mega-Projects**

| Mega-Project |
|---|
| The Louisville Bridges |
| Interstate 71/75 Brent Spence Bridge |
| Proposed Interstate 69 |
| Planned Improvements on I-64, 65, 71, 75 |

*Source: KYTC 2016 Recommended Highway Plan*

# 9.5 Next Steps

The KFP is KYTC's first comprehensive transportation plan that focuses on freight in the state. This plan documents freight assets, identifies future needs, and recommends an overall freight strategy comprised of programs and policies. The KFP was created with the intention of guiding the work of the Cabinet in achieving its visions, "striving to be national leaders in transportation who provide transportation infrastructure and services for the 21st century that deliver new economic opportunities for all Kentuckians."

The next step is important.  KYTC must respond to the regulations set forth in new federal transportation legislation (the FAST Act) and communicate—to both the private sector and the general public—Kentucky's commitment to supporting economic development and addressing freight transportation needs.